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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/717,262	11/22/2000	Takashi Shimada	1405.1027/JDH	1440

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EXAMINER	
EL HADY, NABIL M	

ART UNIT	PAPER NUMBER
2152	

DATE MAILED: 02/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/717,262	SHIMADA ET AL.	
	Examiner	Art Unit	
	Nabil M. El-Hady	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 November 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 7-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 7-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/22/2005 has been entered.

1. Claims 1-5 and 7-15 are pending in this application.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-5 and 7-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. The following words or phrases are not clearly understood rendering the claim vague or indefinite:

a) "processing terminals that are currently available among a plurality of channels capable of a real-time process", claim 1, lines 10-11, claim 2, lines 7-8, claim 8, lines 7-8, and claim 9, lines 7-8 . The use of "channel" here is unclear, especially when "channel" is used as a communication means in "a plurality of channels as communication means between a user and call center" cited in claim 1, or "process requests generated from a plurality of channels" as in claims 2, 8, and 9. Examiner

interprets that as process requests are allocated to processing terminals currently available among a plurality of processing terminals capable of processing said real-time process. This is still unclear in the claim as cited and after amendment.

4. Claims 8 and 12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter "recorded medium". Since the recorded program is merely a set of instructions capable of being executed by a computer, the recorded program itself is not a process. Without the recording medium being a computer readable medium needed to realize the recorded program's functionality, the recorded program is considered non-statutory functional descriptive material.

5. Claims 10 and 14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter "recorded medium". Since the recorded program is merely a set of instructions capable of being executed by a computer, the recorded program itself is not a process. Without the recording medium being a computer readable medium needed to realize the recorded program's functionality, the recorded program is considered non-statutory functional descriptive material.

6. Claims 9 and 13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter "transmission medium". Since the transmitted program is merely a set of instructions capable of being executed by a computer, the transmitted program itself is not a process. Without the transmission medium being a computer readable medium needed to realize the transmitted program's functionality, the transmitted program is considered non-statutory functional descriptive material.

7. Claims 11 and 15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter "transmission medium". Since the transmitted program is merely a set of instructions capable of being executed by a computer, the transmitted program itself is not a process. Without the transmission medium being a computer readable medium needed to realize the transmitted program's functionality, the transmitted program is considered non-statutory functional descriptive material.

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 1-5 and 7-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haigh (US 5,793,861) in view of Naoki et al. (JP 07-030946), hereinafter "Naoki" or in view of Flockhart et al. (JP 10-304073), hereinafter "Flockhart".

10. Haigh is cited by the examiner in a previous office action.

11. Naoki and Flockhart are cited by the applicant in IDS paper filed March 7, 2003.

12. As per claim 1, Haigh discloses the invention substantially as claimed including a multi-channel processing control device (12, Fig. 1), comprising: process request determination means (Transaction Controller 18, Fig. 1) for determining the type of process requests from a plurality of channels (col. 2, lines 2-9; Fig. 1; and col. 5, lines 31-37) based on an indication of properties of a channel that generated said process request (col. 2, lines 64-65, col. 5, lines 31-

37) and based on services in a queue category (col. 2, lines 33-39, col. 5, lines 31-37, 47-54); processing allocation means for allocating process requests (col. 2, lines 24-39; and col. 4, line 52 to col. 5, line 4) to processing terminals that are currently available among a plurality of channels (col. 4, line 52 to col. 5, line 19; col. 5, lines 65-67; col. 6, lines 39-48), administrating means for administrating process requests (col. 2, lines 24-39; and col. 4, line 52 to col. 5, line 4), as well as priority levels therefor (col. 2, lines 26-32; and col. 7, lines 33-39); and allocation means for allocating to any of the processing terminals (col. 2, lines 24-39; and col. 4, line 52 to col. 5, line 4), said allocation performed with consideration given to the priority level and to suitability of the terminal for handling the process (col. 2, lines 27-40; col. 4, lines 52-55; and col. 7, lines 33-39).

13. Haigh does not necessarily designate process requests as real-time or non-real-time requests. Haigh discloses the main features of the claimed invention of receiving process requests from different channels, identifying them, queuing them, allocating them to appropriate and available processing terminals and agents. Haigh, in one embodiment, identifies the type of process requests with the channel types (col. 2, lines 61-65), in another embodiment, identifies the type of the process requests with a time stamp, a counter, or other means (col. 3, lines 12-21). The concept of identification / classification / or determination of the type of process requests is essential in Haigh's disclosure in order to perform the process of queuing and allocation of process requests to appropriate and available processing terminals (col. 2, lines 24-39; and col. 4, line 52 to col. 5, line 4). It would have been obvious to one skilled in the art at the time of the invention that such concept of identification or determination of the type of process requests, which is proved to be essential to the whole process, may be based on a wide parameters including identifying them as real-time process requests, non-real-time process

requests. Such identification or classification is clearly obvious in the prior art. So, as Haigh does not necessarily designate process requests as real-time or non-real-time requests, others in the prior art do. Naoki, for example, discloses that a determination of process requests as real-time and non-real-time may be performed to identify or classify the requests (abstract, and Fig. 1). It would have been obvious to one skilled in the art at the time of the invention to modify the teachings of Haigh with that of Naoki. Using Naoki's determination of process requests as real-time and non-real-time would highly enhance the performance of Haigh's system with the obvious motivation of granting and executing real-time requests with higher level of priority (see, Naoki et al's abstract).

14. Haigh may not explicitly disclose separate allocating, and administrative and allocating means for different classifications of process requests. However, he discloses request-processing system (12, Fig. 1) with administrating and allocating functions (48, Fig. 2) through request controller (18, Fig. 1) with selective processing of requests in the queue (col. 2, lines 31-32). The request controller queues the request in at least one queue 16, the queue may include a plurality of classes or may include a plurality of types of queues (col. 2, lines 33-39). Modifying Haigh's teachings with Naoki's would mean producing real-time and non-real-time request queues handles by corresponding administrative and allocating means.

15. Flockhart, also, discloses that a determination of process requests as real-time and non-real-time may be performed to identify or classify the requests (service –time objectives to different types of calls or call queues for different types of calls. Service-time objectives for a video call and a voice-only call represent differentiation between real-time and non-real time calls. Also, service-time objectives represent a determination of process request based on

services in a queue category, abstract). It would have been obvious to one skilled in the art at the time of the invention to modify the teachings of Haigh with that of Flockhart because using Lockhart's service-time objectives as a determination of process requests as real-time and non-real-time would highly enhance the performance of Haigh's system with the obvious motivation of granting and executing service requests in accordance with their required service level of priority (see, Flockhart's abstract).

16. As per claim 2, the claim is rejected for the same reasons as claim 1 above. In addition, Haigh discloses a multi-channel processing control method (Fig. 2), comprising: determining the type of process requests (col. 2, lines 2-9; Fig. 1; and col. 5, lines 31-37); allocating different types of process requests (col. 2, lines 24-39; and col. 4, line 52 to col. 5, line 4) to processing terminals that are currently available among a plurality of channels (col. 4, line 52 to col. 5, line 19; col. 5, lines 65-67; col. 6, lines 39-48) capable of processing each type, and administrating process requests (col. 2, lines 24-39; and col. 4, line 52 to col. 5, line 4) as well as priority levels therefor (e.g. col. 2, lines 27-35).

17. As to claim 3, Haigh discloses allocating process request currently being administrated to a most appropriate processing terminal, based on the priority level of the request and suitability of available processing terminals capable of processing said request (col. 4, line 52 to col. 5, line 4; col. 5, lines 47-54; and col. 6, lines 20-24).

18. As per claim 4, Haigh discloses the invention substantially as claimed including a multi-channel processing control method (Fig. 2) for processing terminals (106, Fig. 7) handled by operators processing incoming tasks and processing terminals handled by operators processing

outgoing tasks (AGENT STATION 34, Fig. 1, 104, 106, Fig. 7; and col. 6, lines 4-7), at least one of the operators being a dual-duty operator capable of processing either incoming tasks or outgoing tasks (col. 6, lines 6-9), comprising: allocating the processing terminal handled by said dual-duty operator to either incoming or outgoing tasks based on a current status of the processing terminals handled by the operators (col. 6, line 6-19, 20-38); wherein said incoming tasks and outgoing tasks include process requests arising from channels (col. 2, lines 2-9; Fig. 1; and col. 5, lines 31-37) including, in addition to the processing terminals handled by said operators, Web agent handling process requests generated by Internet web servers (col. 3, lines 54-57; and col. 7, lines 18-21), e-mail agents handling process requests generated by e-mail servers (col. 3, lines 57-58; and col. 7, lines 22-23); and automatic voice response devices automatically processing incoming signals from public lines (col. 3, lines 22-39; and Fig. 7).

19. Haigh does not necessarily disclose process requests as real-time or non-real-time tasks. Naoki, on the other hand, discloses process requests as real-time and non-real-time requests. It would have been obvious to one skilled in the art at the time of the invention to modify the teachings of Haigh with that of Naoki because using Naoki's determination of process requests as real-time and non-real-time tasks would highly enhance the performance of Haigh's system with the obvious motivation of granting and executing real-time requests with higher level of priority (see, Naoki et al's abstract).

20. Haigh does not necessarily disclose process requests as real-time or non-real-time tasks. Flockhart, on the other hand, discloses process requests as real-time and non-real-time requests. It would have been obvious to one skilled in the art at the time of the invention to

modify the teachings of Haigh with that of Flockhart because using Lockhart's service-time objectives as a determination of process requests as real-time and non-real-time would highly enhance the performance of Haigh's system with the obvious motivation of granting and executing service requests in accordance with their required service level of priority (see, Flockhart's abstract).

21. It is clear that Haigh discloses the main features of the claimed invention of receiving process requests from different channels, identifying them, queuing them, allocating them to appropriate and available processing terminals and agents. Haigh, in one embodiment, identifies the type of process requests with the channel types (col. 2, lines 61-65), in another embodiment, identifies the type of the process requests with a time stamp, a counter, or other means (col. 3, lines 12-21). The concept of identification / classification / or determination of the type of process requests is essential in Haigh's disclosure in order to perform the process of queuing and allocation of process requests to appropriate and available processing terminals (col. 2, lines 24-39; and col. 4, line 52 to col. 5, line 4). It would have been obvious to one skilled in the art at the time of the invention that such concept of identification or determination of the type of process requests, which is proved to be essential to the whole process, may be based on a wide parameters including identifying the requests as real-time process requests, non-real-time process requests. Such identification or classification is clearly obvious in the prior art. So, as Haigh does not necessarily designate process requests as real-time or non-real-time requests, others in the prior art do. Such as Naoki or Flockhart.

22. As claim 8, the claim is rejected for the same reasons as claims 1 and 2 above. In addition, a recording medium on which is recorded a program for a multi-channel control performing the method of claim2 is inherent in Haigh, Noaki, and Flockhart disclosure.

23. As per claim 9, the claim is rejected for the same reasons as claims 1, 2, and 8 above. In addition, a transmission medium transmitting a program for a multi-channel control performing the method of claim2 is inherent in Haigh, Noaki, and Flockhart disclosure.

24.

25. As claim 10, the claim is rejected for the same reasons as claim 4 above. In addition, a recording medium on which is recorded a program for a multi-channel control performing the method of claim 4 is inherent in Haigh, Noaki, and Flockhart disclosure.

26. As per claim 11, the claim is rejected for the same reasons as claims 4 and 10 above. In addition, a transmission medium transmitting a program for a multi-channel control performing the method of claim 4 is inherent in Haigh, Noaki, and Flockhart disclosure.

27. As per claims 5, and 12-15, Haigh discloses among the processing terminals handled by said operators, at least one processing terminal is kept available for real-time incoming tasks (col. 6, lines 20-24)..

28. As to claim 7, Haigh discloses said outgoing tasks include preplanned non-real process requests not requiring real-time processing (col. 7, lines 33-39).

29. Applicant's arguments filed 11/22/2005have been fully considered but they are not persuasive.

30. In the remarks, applicants argued in substance that (1), Haigh does not support an anticipatory-type rejection by not describing feature of real-time and non-real time determination of process requests. (2) Haigh and Naoki do not disclose requests are based on services in a queue. (3) no motivation to modify Haigh's queue of transactions into an appropriate queue with a transaction in a queue as discussed by Naoki.

31. Examiner respectfully traverses applicants' remarks.

32. As to point (1), Haigh does not support anticipatory-type rejection, but supports an obviousness-type rejection in view of Noaki or Flockhart as discussed above.

33. As to point (2), Haigh clearly discloses requests are based on services in a queue. Haigh discloses different queues with different services, one queue with sub-queues for different services or one queue with different identified services (col. 2, lines 33-39, col. 5, lines 31-37, 47-54). Flockhart, also discloses requests are based on services in a queue (service –time objectives to different types of calls or call queues for different types of calls. Service-time objectives for a video call and a voice-only call represent differentiation between real-time and non-real time calls. Also, service-time objectives represent a determination of process request based on services in a queue category, abstract).

34. As to point (3), In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Naoki's reference is used to advance the concept of differentiating between what can be considered real-time process request and what can be considered non-real time process request. Designating requests as such may be based on many factors like the type of the requesting channel, the type of service, and others.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nabil M. El-Hady whose telephone number is (571) 272-3963. The examiner can normally be reached on 9:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 13, 2006

Nabil El-Hady, Ph.D., M.B.A.
Primary Examiner
Art Unit 2152